## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: AINSCOW ET AL.

Application No.: 10/579,167

Filed: FEBRUARY 8, 2007

Title: COMPOSITION INCLUDING ONE OR MORE

HYDROLYTICALLY UNSTABLE COMPONENTS

Examiner: LORNA M. DOUYON

Art Unit: 1796
Confirmation No.: 8916

Attorney Ref.: 007130.00010

## AFFIDAVIT UNDER 37 CFR § 1.132

I, Anthony J. O'Lenick, Jr., being duly sworn, do hereby declare under penalty and perjury that I am over the age of 18 and a resident of Dacula, Ga United States of America. I am currently President of Siltech LLC, a specialty silicone company located in Dacula Ga. I have held this position for over 20 years.

Prior to that I was President of Alkaril Chemical, a specialty chemical and surfactant company specializing in soil release polymers.

I am an inventor on over 250 U.S. Patents covering silicone compounds, detergents, soil release polymers and surfactants.

I possess a Graduate Degree in Organic Chemistry from Rutgers University and have won several awards in the field of surfactants.

I have written 6 books covering topics in silicone and surfactant chemistry.

I have read and understood the Ainscow patent application Serial Number 10/579,167, the following are my conclusions;

The Ainscow application has three required elements:

1. An aqueous sensitive component

- A non aqueous carrier component (mineral oil and gallant)
- 3. A bleaching agent

The invention relates to the ability to use these elements to make a composition suitable for use in a cleaning or washing process. The choice of the three is critical to the functionality.

The current office action rejects the pending claims as anticipated by Bone (7,083,047).

The Bone application is directed to:

Claim 1 - A process for conditioning fabrics comprising the steps of: adding to the beginning of a laundry wash cycle of a washing machine in the drum of the washing machine, a water soluble package comprising a polymeric film, the polymeric film comprising a polymeric backbone derived from a polymer which is water soluble, and one or more derivatising groups attached to the backbone, the derivatising group(s) being derived from a parent material comprising a C4 to C22 hydrocarbyl chain, wherein the polymeric film has a solubility or dispersibility in anionic or combinations of anionic/nonionic surfactants of more than 15 minutes when the surfactant concentration in water is greater than 0.05 g/L and a solubility or dispersibility of less than 15 minutes when the surfactant concentration in water is less than 0.05 g/L, and contacting the contents of the package with fabric in the rinse cycle of the washing machine in the drum of the washing machine.

Bone '047 states:

The inventors have now found that a water soluble package can be chemically modified so that the rate at which it breaks down, e.g. dissolves, disperses or otherwise disintegrates, is dependent on the concentration of washing detergent present in a liquor.

In particular, it has been found that by modifying the structure of a water soluble polymeric film, such as a PVOH film, with a modifying group, e.g. with a specific acetal group, the film remains substantially intact in the presence of an anionic and/or nonionic detergent, e.g. during the wash cycle of a laundry operation, and disintegrates when the concentration of the detergent reduces sufficiently, e.g. during the rinse cycle of the laundry operation.

The Bone patent lacks the required elements of the present application specifically:

- 1. An aqueous sensitive component
- A non aqueous carrier component (mineral oil and gallant)

## 3. A bleaching agent

Laundry detergents are devoid of bleach, a required element in the current application. The word "bleach" does not exist in Bone. In fact the choice of the non-aqueous carrier, mineral oil, with its inherent lack of polarity, the presence of the bleaching agent and the required element of the aqueous sensitive component are all lacking in Bone. In my opinion Bone fails as a reference for a rejection under 35 USC 102, since the required elements are missing in Bone and since Bone addresses a substantially different problem, namely the dissolution of a package of fabric softener devoid of bleach, while the present application addresses stability of a aqueous sensitive component in bleach and a non-polar solvent.

Claim 11 stands rejected under 35 USC 103 in light of Bone. There is no reason of record where the required elements described above can be found to justify a modification to reject claim 11. In other words the elements lacking from Bone cannot appear in a modification if they are lacking in the first place.

The next reference is Smith (2002/0142930). Smith teaches:

Claim 1 - A method of washing dishware/tableware in an automatic dishwashing machine having a single or multi-compartment product dispenser which is normally closed and sealed after charging said machine and prior to delivery of a dishwashing product into the wash liquor and wherein said dishwashing product comprises one or more dishwashing compositions in a unit dose form having a degree of deformability greater than about 10% and a shape and size such that said dishwashing product occupies more than about 60% of the volume of the corresponding compartment of said product dispenser in its closed state, said method comprising the step of contacting said dishware/tableware with said dishwashing product.

Unlike Bone, Smith is directed to dishwashing. Of particular interest Smith does mention bleach as a potential ingredient, but teaches away from the selection of mineral oil as a non-aqueous carrier. Smith goes to great detail on selection of polar carriers.

Smith specifies polar carriers:

[ 0015] The organic solvent system for use herein is preferably selected from organoamine solvents, inclusive of alkanolamines, alkylamines, alkylamenes and mixtures thereof; alcoholic solvents inclusive of aromatic, aliphatic (preferably C.sub.4-C.sub.10) and



cycloaliphatic alcohols and mixtures thereof; glycols and glycol derivatives inclusive of C.sub.2-C.sub.3 (poly)alkylene glycols, glycol ethers, glycol esters and mixtures thereof; and mixtures selected from organoamine solvents, alcoholic solvents, glycols and glycol derivatives. In one preferred embodiment the organic solvent comprises organoamine (especially alkanolamine) solvent and glycol ether solvent, preferably in a weight ratio of from about 3:1 to about 1:3, and wherein the glycol ether solvent is selected from ethylene glycol monobutyl ether, diethylene glycol monomethyl ether, ethylene glycol monoethyl ether, diethylene glycol monoethyl ether, propylene glycol monobutyl ether, and mixtures thereof. Preferably, the glycol ether is a mixture of diethylene glycol monobutyl ether and propylene glycol butyl ether, especially in a weight ratio of from about 1:2 to about 2:

Smith defines the carrier by Hansen Solubility parameter

[0017] i) a fractional dispersion Hansen solubility parameter greater than about 40%, preferably greater than about 60% and more preferably greater than about 80%; and

[0018] ii) a fractional polar Hansen solubility parameter less than about 60%, preferably less than about 40% and more preferably less than about 20%.

[0019] Fractional dispersion Hansen solubility parameter of a solvent is defined as the ratio (multiplied by 100) of the dispersion Hansen solubility parameter to the sum of the dispersion, polar and hydrogen bonding Hansen solubility parameters. Fractional polar Hansen solubility parameter of a solvent is accordingly defined.

[0020] Solvents having the fractional Hansen solubility parameters described hereinabove are particularly valuable for purposes of bleach stability. These solvents have very low water absorption, this is particularly important in cases wherein the bleach is contained in pouches, because apart from the problem of loss of bleach, bleach decomposition gives rise to oxygen gas which can cause bloating of the pouch material and give the pouches a fluffy appearance (not very attractive to the consumers). Particulate bleaches suitable for use herein include inorganic peroxides inclusive of perborates and percarbonates, organic peracids inclusive of preformed monoperoxy carboxylic acids, such as phthaloyl amido peroxy hexanoic acid and di-acyl peroxides. Preferred peroxides for use herein are percarbonate and perborate bleach.



Mineral oil lacks the "polar and hydrogen bonding" attributes described in Smith [0019] above. One of ordinary skill in the art would not use a material lacking the required Hansen solubility parameters taught by Smith. Mineral oil simply would be predicted not to work in the formulation developed by the present inventor. (emphasis added)

The final reference is MacQueen (6,268,466). This reference teaches the gellants. The gellants are useful to gel a variety of oils, including mineral oils, but clearly lack the required elements in the Ainscow application:

- 1. An aqueous sensitive component
- 2. A non aqueous carrier component (mineral oil and gallant)
  - A bleaching agent

Lacking these elements and in light of the above information, a combination of the referenced patents cannot make the required elements obvious.

Further Affiant saith not.

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COUNTRY OF THE UNITED STATES OF AMERICA, STATE OF GEORGIA

COUNTY OF Gwinnett )

Before me this 29th day of March 2010, personally appeared the above named individual, to me known to be the person who is described in, and who executed the foregoing document.

Notary Public